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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PHAM, TUAN	

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/634,977	SWANT, JOHN M.	
	Examiner	Art Unit	
	TUAN A. PHAM	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 09/18/2006, with respect to the rejection(s)of claim(s) 1-14 under 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bringby et al. (U.S. Patent No.: 6,285,883).

Election/Restrictions

2. Applicant's election without traverse of Group I: claims 1-14 in the reply filed on 11/23/2007 is acknowledged.

Claim Objections

3. Claim 6 is objected to because of the following informalities: in line 3, "state" should be changed to –station--. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically a software application. Computer

programs claimed as computer code per se, i.e., the descriptions or expressions of the programs, are not physical "things", nor are they statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention, which permit the computer program's functionality to be realized. In contrast, a claimed computer readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus statutory. See MPEP §2106 Section IV.B.I(a). The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 9-13, claims the non-statutory subject matter of a program. Data structures claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium and encoded on a computer- readable medium then the Applicants has not complied with 35 U.S.C 101.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1-4, 6-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter,"Kiukkonen") in view of Bringby et al. (US Patent No.: 6,285,883, hereinafter, "Bringby").**

Regarding claim 1, Kiukkonen teaches a method of testing performance of a receiver, the method comprising.

establishing a communication link between a transmitter and a receiver (see figure 5, TX 400A, receiving part of base station ([0033-0036]);

transmitting from the transmitter a signal bearing a predetermined message at a predetermined attenuation (see figure 5, [0033-0036], the predetermine attenuation read on the test signal transmit at 0.1 dB to the receiver);

receiving the predetermined message at an antenna coupled to a receiver (see [0029]);

measuring the power of the signal received by the antenna at a point between the receiver and the antenna ([0026-0028]); and

calculating a bit-error rate by comparing the receiver output to the predetermined message (see [0026-0028]);

It should be noticed that Kiukkonen fails to teach determining performance by evaluating the bit-error rate, the predetermined attenuation, and the received message power. However, Bringby teaches determining performance by evaluating the bit-error rate (see col.1, ln.30-32), the predetermined attenuation (read on propagation path loss measurement that measure the amount of attenuation of transmit signal, col.1, ln.30-32), and the received message power (read on signal strength measurement, col.1, ln.30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bringby into view of Kiukkonen in order to reduce oscillating handoffs and improve network performance as suggested by Bringby at col.2, ln.45-47.

Regarding claim 2, Kiukkonen further teaches receiver is deployed in a communication network (see [0036] GSM system).

Regarding claim 3, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 4, Kiukkonen further teaches at least one selected from the group of a voice channel, a data channel, and a control channel (see [0022]).

Regarding claim 6, Kiukkonen teaches in a mobile communication network, comprising:

a radio base station receiver test system (see figure 5, transmitter 400A, receiving part) that transmits a predetermined message to a base station receiver (see figure 5, receiving part, col.4, [0036]) at a predetermined attenuation (see figure 5,

[0033-0036], the predetermine attenuation read on the test signal transmit at 0.1 dB to the receiver), that measures received power at the antenna ([0029]), that calculates the bit-error rate of the predetermined message received by the radio base station receiver (see [0026]).

It should be noticed that Kiukkonen fails to teach determining performance by evaluating the bit-error rate, the predetermined attenuation, and the received message power. However, Bringby teaches determining performance by evaluating the bit-error rate (see col.1, ln.30-32), the predetermined attenuation (read on propagation path loss measurement that measure the amount of attenuation of transmit signal, col.1, ln.30-32), and the received message power (read on signal strength measurement, col.1, ln.30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bringby into view of Kiukkonen in order to reduce oscillating handoffs and improve network performance as suggested by Bringby at col.2, ln.45-47.

Regarding claim 7, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 8, Kiukkonen further teaches GSM communication network (see [0036] GSM system).

Regarding claim 9, Kiukkonen teaches in computer readable medium, a receiver testing application supporting field testing of base station receivers in a mobile communication network (see figure 5, [0002]), comprising:

a routine for establishing a communication link between a transmitter and a receiver (see figure 5, TX 400A, receiving part of base station ([0033-0036]);

a bit-error rate detector routine that compares a received message to a predetermined message to determine errors in the received message (see [0026]);

a control routine for controlling transmission attenuation level of a signal bearing the predetermined message (see [0034-0036]);

a communication routine for requesting measured power of received signals having the predetermined message (see [0026]).

It should be noticed that Kiukkonen fails to teach determining performance by evaluating the bit-error rate, the predetermined attenuation, and measure power. However, Bringby teaches determining performance by evaluating the bit-error rate (see col.1, ln.30-32), the predetermined attenuation (read on propagation path loss measurement that measure the amount of attenuation of transmit signal, col.1, ln.30-32), and measure power (read on signal strength measurement, col.1, ln.30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bringby into view of Kiukkonen in order to reduce oscillating handoffs and improve network performance as suggested by Bringby at col.2, ln.45-47.

Regarding claim 10, Kiukkonen further teaches the communication routine requests the measured power before the received message enters the receiver (see [0033]).

Regarding claim 11, Kiukkonen further teaches the control routine increases the

transmission attenuation level in response to the signal bearing the predetermined message (see [0035-0036]).

Regarding claim 12, Kiukkonen further teaches the communication routine requests the measured power from a power measurement device (see [0026]).

Regarding claim 14, Kiukkonen teaches in a cellular communication network, a method of determining base station receiver performance, comprising:

transmitting a known message at a known attenuation level (see figure 5, [0034]);

receiving the message at an antenna coupled to a base station receiver (see figure 5, receiving part, [0029, 0036]);

measuring the power of the received message (see [0026]);

transmitting the received message from the base station receiver to a network element (see figure 5, signal receive at antenna to transmit to receiving part included ATT 515);

calculating the bit error rate of the received message at the network element (see [0026]).

It should be noticed that Kiukkonen fails to teach determining performance by evaluating the bit-error rate, the predetermined attenuation, and the received message power. However, Bringby teaches determining performance by evaluating the bit-error rate (see col.1, ln.30-32), the predetermined attenuation (read on propagation path loss measurement that measure the amount of attenuation of transmit signal, col.1, ln.30-

32), and the received message power (read on signal strength measurement, col.1, ln.30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bringby into view of Kiukkonen in order to reduce oscillating handoffs and improve network performance as suggested by Bringby at col.2, ln.45-47.

8. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter,"Kiukkonen") in view of Bringby et al. (US Patent No.: 6,285,883, hereinafter, "Bringby") as applied to claim 1 above, and further in view of Ostman et al. (U.S. Patent No.: 6,529,494, hereinafter, "Ostman").**

Regarding claim 5, Kiukkonen and Bringby, in combination, fails to teach increasing the magnitude of the predetermined attenuation until the communication link is dropped. However, Ostman teaches such features (see col.5, ln.4-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ostman into view of Kiukkonen and Bringby in order to reduce the interference as suggested by Ostman at col.2, ln.14.

9. **Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter,"Kiukkonen") in view of Bringby et al. (US Patent No.: 6,285,883, hereinafter, "Bringby") as applied to claim 9 above, and further in view of Laham et al. (U.S. Patent No.: 6,507,737, hereinafter, "Laham").**

Regarding claim 13, Kiukkonen and Bringby, in combination, fails to teach the evaluation routine medium resides in a MSC test unit. However, Laham teaches such features (see figure 1, col.9, ln.7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Laham into view of Kiukkonen and Bringby in order to reduce oscillating handoffs and improve network performance as suggested by Bringby at col.2, ln.45-47.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology 2600
Art Unit 2618
January 19, 2008
Examiner

Tuan Pham